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ABSTRACT

Specific indicators of quality and possible trends relative to small rural high schools in the 19 member states of the North Central Association (NCA) were examined. Data were derived from "North Central Quarterly" reports. Examination of rural high school demographic setting and enrollment size included 1969 and 1974 comparisons of: (1) demographic setting of NCA high schools; (2) sample of 15 Iowa local school districts with population of major town under 5,000 or high school enrollment less than 500; (3) distribution of NCA high schools by enrollment groups; (4) mean enrollment of NCA high schools and grade groupings; (5) number and percent of NCA standard high schools by demographic setting and size of high school. Quality indicators examined included 1969 and 1974 comparisons of: (1) NCA high schools with enrollments of less than 200 with those of 200 to 499 in terms of enrollment, number of schools, average pupil/professional ratio, average number of full time guidance workers, and average per pupil library expenditure and (2) average annual salaries of principals and superintendents in schools of less than 500 enrollment and beginning teacher salaries of all NCA high schools. It was concluded that high schools of less than 500 constitute a significant group in the NCA, meet the same quality standards as larger schools, and reflect the "ideal" size. (JC)

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SOME INDICATORS OF QUALITY - COMPARING NCA RURAL HIGH SCHOOLS IN THE NON METROPOLITAN AREAS OF THEIR 19 STATES IN 1969 AND 1974

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Some Indicators of Quality - Comparing NCA Rural High Schools in the Non Metropolitan Areas of their 19 States in 1969 and 1974

William H. Dreier *

Each year the summer issue of the North Central Quarterly includes an article of 20 or more pages reporting "Trends in NCA Schools." In the 1969 and the '70 years this was prepared by John A. Stanavage, Executive Secretary of the Commission on Schools. The 1975 article was written by James L. Carpenter, Director of Research and Evaluation, Educational Program Planning Department, Chicago Public Schools. This brief report will draw mainly from Volume XLIV Summer, 1969, Number 1, and Volume 49, Summer 1974, Number 1, to examine two major concerns. First to see if any trends about NCA member rural high schools in the 19 member states of the North Central Association can be identified within this five year period, and second to look at some specific indicators of quality reported for 1969 and 1974 by these same rural high schools.

The ERIC/CRESS 1974 publication written by Edward O. Moe and Lewis R. Tamblyn states: "Non-metropolitan or the new rural would be defined as in the 1970 Census as people and places outside of counties containing a city of 50,000 or more inhabitants...This is 31.4 percent of the total population, the metropolitan population would comprise 68.6 percent of the total U.S. population for 1970." (Moe & Tamblyn, 1974, p. 49)

Beginning in 1969 the NCA trend articles have grouped the member high schools within its 19 states and the Dependents Schools by their demographic setting and by enrollment-size groups. The demographic settings of member high schools is shown in Table 1, comparing 1969 and 1974.

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Table 1

Demographic Setting of NCA Member
High Schools: Comparing 1969 and 1974

Classification	Per Cent Member High Schools 1969	1974
1. City of 400,000 or More	9.35	8.01
2. City of 100,000 to 399,999	*	6.58
3. Suburban: Close to a City Over 100,000	18.79	15.97
4. City Between 5,000 and 100,000	31.95*	30.77
5. Small Town Under 5,000	26.19	26.19
6. Rural	13.72	12.49

* in 1969 the classification was 5,000 to 399,000 (not suburban)

Since this classification breaks at places of 5,000 rather than 50,000 (Census minimum for a Standard Metropolitan Statistical Area) and the new rural, divisions 5 and 6 have been combined and called Rural High Schools in this paper.

What size of high school is likely to be found in a town of less than 5,000 people? If the rule of thumb that 20 percent of the population is of common school age (kindergarten through 12th grade) and in school, then the small town of 5,000 might have 1,000 students K-12. A four year high school would have about one fourth or an enrollemtn of 250 pupils. In most states, however, the towns and cities also include the rural area around it and this may add more people and increase the enrollment of the district and the size of the high school.

This kind of community district with a single public high school serving a town of about 5,000 and its community is illustrated by Table 2. This list of 15 towns in Iowa was selected at random from a listing of school districts whose enrollments in grades 10, 11 and 12 ranged from 503 to 288. Eleven of the 15 have NCA member Senior High Schools and eight of the towns are county seats. Two of the districts have no major town of 2,500 or more while another is located in a Standard Metropolitan Statistical Area around an unincorporated town. One of the generalizations which can be drawn is that even as 5,000 people are needed to support a high school of 250 it takes at least 10,000 people to support a senior high school of 500.

Table 2

Sample of 15 Local School Districts in Iowa
With Population of Major Town
Under 5,000 or High School Enrollment Less than 500

District	1970 Population of Major Town	Community School District Population	Enrollment of Grades 10-12
Albia *NCA	4,151	9,248	503
Algona *NCA	6,030	8,500	370
Anamosa *NCA	4,389	7,650	439
Benton County	701	6,400	383
Cherokee *NCA	7,272	10,000	416
Eagle Grove NCA	4,489	not given	447
Emmetsburg NCA	4,150	6,500	289
Glenwood NCA	4,421	8,000	365
Independence *NCA	5,910	11,550	435
Mid Prairie	1,488	7,500	268
Pleasant Valley NCA	Non-Incorporated Place in Metro County	8,550	427
Red Oak *NCA	6,210	8,000	418
Shenendoah NCA	5,968	9,500	375
Vinton *NCA	4,845	7,500	361
Winterset *NCA	3,654	7,500	357

*County seat town - N=8
1974 NCA Member High School - N=11

In addition to the demographic settings of the member high schools the NCA trends article also gives a grouping of member schools by enrollment and many of their statistics use the enrollment grouping shown in Table 3, which start with 0 to 199 and continue to over 2,000.

In the past five years the total number of NCA member high schools has changed little, from 3,763 to 3,748. The largest number of member schools continue to have enrollments between 200 and 1,000, while the number of larger schools (over 1,000) has tended to increase and the number of smallest schools (under 200) have decreased. The trends article in the 1971 summer issue made this comment:

> "The very small high schools, those of 200 students or under, have decreased nearly 50 percent since 1964. Schools of moderate smallness, those between 200 and 500, have experienced a similar though not so drastic decline.... The Secondary Commission recently impaneled a Committee on Small Schools in an effort to assist its small member high schools in sustaining both education quality and NCA membership." (Stanavage, 1971, p. 218)

Table 3

Distribution of NCA Member High Schools
By Enrollment Groups, 1969 and 1974

		1969 Number	1974 Number
1.	Over 2,000	340	420
2.	1,500 to 1,999	340	412
3.	1,000 to 1,499	508	588
4.	500 to 999	1,122	1,104
5.	200 to 499	1,148	1,109
6.	0 to 199	305	212
	Grand Total	3,763	3,748

It should be noted that the NCA had 50 member high schools with enrollments of less than 100 in 1964 and this size group (0 to 99) was last used in 1969.

One more characteristic of the high school enrollments figures of NCA member high schools should be pointed out and that is the variation in the number of age groups (or grades) in the member high schools. These range from three years, to the standard four years, to five and six year high schools. Table 4 shows that while the mean enrollments of member high schools has increased significantly in the five years from 864 to 1,000, the proportion of high schools with other than a four year grade grouping has changed only from 43 to 40 percent. Many of the Iowa member schools shown in Table 2 have a three year senior high school, and only for purposes of comparison was the enrollment of grades 10,11 and 12 shown for each district. When a district changes from a three year to a four year high school the enrollment obviously increases by about 30 percent. The three percent drop in three-year NCA membership schools and three percent increase in four-year high schools helps explain the increase in mean enrollment from 864 to 1,000 over the five year period.

Table 4

Mean Enrollment of NCA Member High Schools and Their Grade Grouping for 1969 and 1974

	1969	1974
Mean Enrollment of All NCA Member H.S.	864	1,000
Grade Groups in NCA Member H.S.		
5 and 6 grades	12.2%	12.0%
4 years in H.S.	57.1	60.1
3 years & other plans	30.7	27.9
	100.0%	100.0%

Table 5

Number and Percent of NCA Standard High Schools
By Demographic Setting and
Size of High School, 1969 and 1974

	1969		1974	
	Number	Percent	Number	Percent
Classification	3,763	100	3,748	100
Rural and Towns of less than 5,000 population	1,503	39.91	1,450	38.68
Enrollment in H.S. of less than 500	1,453	38.60	1,221	32.60

Recognizing that the two classification systems used by the NCA trends articles (demographic setting and enrollment size) did not correspond to the new rural (non-metropolitan) and metropolitan classification, it nevertheless can be seen from Tables 1 and 3 that classifications 5 and 6 in each instance relate to the kind of school units listed in Table 2. It was therefore, decided that for the purpose of the report NCA rural high schools would be those demographically classified as rural and in small towns under 5,000 and those with enrollments in high schools of less than 500. Table 5 indicates that the member schools in places under 5,000 has not changed (in round numbers going from 40 to 39 percent) while the proportion of NCA member high schools enrolling less than 500 students was 39 percent in 1969 and 33 in 1974. (Again this may indicate that as districts create Middle Schools of grades 5, 6, 7 and 8, or of grades 6, 7 and 8, they are pushing more schools over the 500 size.

The North Central Association of Colleges and Schools was founded in 1895 and for many decades has been a leader in accrediting high schools. Its current "blue book" lists twelve standards and each standard may in turn have from six to two dozen or more specific statements which the member school supports. These minimum indicators of quality do not in themselves determine the quality of the school but when available give the foundation upon which a quality program can be constructed. The annual trends article usually includes about 14 pages and 15 tables describing the member schools in each of the 19 states and Department of Defense Dependent Schools. From these tables six items have been selected and will be examined to see what trends among theee general indicators of quality can be described when NCA member high schools of enrollment of 0 to 199 are compared with those having enrollments of 200 to 499 in 1969 and in 1974.

Since the time when the presidential candidate James Garfield made his historic statement about an ideal school being "Mark Hopkins (President of Williams College in Massachusetts) on one end of a log and the student on the other" the public as well as the education profession has been aware of the significance of the ratio between professional staff and pupils. In the high school of less than 200 this is about 1 to 11 and in the high school of 200 to 500 it is 1 to 15.

The second item in Table 6 is average number of full time guidance workers per school. This has been an item with some federal funding under the National Defense Education Act which was first passed after Sputnik in 1957. The number of such workers per school has declined by .4 of a full time person in these five years to .73 for the 200 and fewer students school and to 1.10 for the 200 to 500 student NCA school.

Table 6

Some Indicators of Quality Comparing NCA Member High School with Enrollments of Less Than 200 With Enrollments of 200 to 499 Students In 1969 and In 1974

Year	1969		1974	
Enrollment	0 to 199	200-499	0 to 199	200-499
Number Schools	305	1,148	212	1,009
Average Pupil to Professional Staff Ratio	(not given before 1974)		10.94	14.97
Average No. Full Time Guidance Workers Per School	1.13	1.57	.73	1.10
Average Per Pupil Library Expenditure	$12.60	$7.21	$14.02	$10.09

Library expenditure per pupil have changed in these five years and have increased from $12.60 to $14.02 for the 200 and fewer pupil school, while increasing from $7.21 to $10.09 in the 200 to 500 pupil high school. This is a 11.3 percent increase compared with a 39.9 percent increase for the school enrolling from 200 to 499 students.

In times of inflation the general assumption of the relation between quality and price is tested and many times found false. For this reason the final three items are not included with Table 6 as "Indicators of Quality" but are in Table 7 as measure of salary. They may also be indicators of inflation and the constant pressure of the education profession to keep pace with higher professional incomes of accountants, engineers, and business executives and many others.

The high school principals' salary in five years in these schools has

increased 27 and 37 percent to $13,200 and $14,900 and the larger school (over 200) differential has increased from $500 to $1500. The salary of the superintendent has also increased, even more in percentage, to $17,800 and $22,000. The differential in mean salary favoring the school with 200 to 500 high school students has also increased. No breakdown by size of school was given for teacher salaries but by comparing the figure under which either 87.4 or 76 percent of the beginning teachers were paid, the figure went from $6500 in 1970 to $11,500 in 1974 or roughly a 70 percent increase. A low salary figure has a difficult time catching up and while the percent changes are great in these "new rural" schools the salary differential between teachers and administrators seems to have changed little between 1969 and 1974.

Table 7

Average Annual Salary of High School Principals, District Superintendents of Schools of Enrollments Under 500 and Beginning Teachers Salaries of all NCA Member High Schools, 1969 and 1974

Year	1969		1974	
Enrollment	0 to 199	200-499	0 to 199	200-499
Number Schools	305	1,148	212	1,009
Average Annual Salary of High School Principal	$10,345	$10,858	$13,233	$14,927
Average Annual Salary of District Superintendent	$12,779	$14,094	$17,820	$22,090
Percent of All NCA Schools With Beginning Salary for BA Degree Teacher of Less Than Amount Stated	87.41%		76.03%	
	$6,500		$11,500	

In conclusion it is important first to refer to a statement in the "Fifth Annual Gallup Poll of Public Attitudes Toward Education" (Gallup, 1973, p. 40). "When the views of all persons who gave a figure which represented, for them, the ideal size of a high school in a "new city", the median figure turns out to be 500."

This report has found it difficult to select out from available data separate figures and facts about high school in the "new rural" non-metropolitan areas. Certainly not only small towns of 5,000 but larger towns up to 50,000 and the areas they serve can be called, and can answer with pride, to the identification of "new rural" because they are not suburban, urban, or metropolitan, and they have schools which many Americans believe to be the ideal size.

The high schools of fewer than 500 students are a significant group in the 19 states which make up the North Central Association. They meet the same quality standards as do schools with a 1,000 or over 2,000 students. In the eye of the public they are identified as the "ideal size" and indeed they have many qualities which support this identification.

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